I T   P R O J E C T   E V A L U A T I O N

Return on Investment Program Funding Application (FY 2003 Request)

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

SECTION I: PROPOSAL

Date: June 26, 2001

Agency Name: **Iowa Juvenile Home, Toledo**

Project Name: **I**mplementing *Campuswide Area Network* (**CAN**):

Combining VOICE (telephony) and DATA (current infrastructure) Services

WIRELESS *Local Area Network* (LAN)

WEBFILTER

Replacing INTRAWEB SERVER

School Database Software

Expenditure Name: Not Applicable

Agency Manager: **Han Nguyen**, ITSIII

Agency Manager Phone Number / E-mail: (641)484-2560 x222; hnguyen1@dhs.state.ia.us

Executive Sponsor (Agency Director or Designee): **Daniel Chargo**, Business Manager, dchargo@dhs.state.ia.us
Robert Eppler, Superintendent, reppler@dhs.state.ia.us

Request For ROI Application Waiver:

Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation: Not Applicable

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute? ☐**YES** (If "YES," explain) ☒ **NO**

Explanation: Not Applicable

Is this project or expenditure required by State statute?   ☐ **YES** (If "YES," explain)   ☒ **NO**

Explanation: Not Applicable

Does this project or expenditure meet a health, safety or security requirement?
☒**YES** (If "YES," explain)   ☐ **NO**

Explanation: 1. Voice system: Improve the continuity in communication for IJH's staff and its clients
2. Wireless: Authorized/licensed access zone
3. Web filtering services: * A better Internet filtering application for youth server
                                          * Replace a better Intraweb server for staff
4. School Database application: Institution/State confidentiality laws must not be compromised. With a new Database server located at our institution, access to this database will always require proper user name and password authentication. Current old inefficient method of record keeping prevents our communication with other school's systems.

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☒ **YES** (If "YES," explain)   ☐ **NO**

Explanation: 1. Take advantage of our current infrastructure system: combine data and voice (telephony system) with a little or no adversely affect on network's connectivity (It takes approximately 80KB per phone call. We have a total of 120 phones: 120x 80KB = 9600KB if everyone is on the phone).
With this integrated telephony system, we will gain several features (will list later) without spending additional amount of money compared to the traditional *Public Branch Exchange* (PBX) telephony system.
2. Maintain security of network using authorized or licensed wireless LAN
3. Internet Filtering Application: Not Applicable
4. Intraweb Server: Not Applicable
5. School Databse Software: A special training school like the Herbert Hoover High School for youth who live here, it is possible to tailor this software to meet the school's special requirements. Technology is necessary to upgrade from current hand written recording system. This software will be compliance with the state of Iowa enterprise technology standard in the very near future--100 % E versus our current handwritten record keepings (like transcipts, report cards, permanent record cards and cumulative file folders.)

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☐ **YES** (If "YES," explain)   ☒ **NO**

Explanation: Not Applicable

Is this a "research and development" project or expenditure?   ☐ **YES** (If "YES," explain)   ☒ **NO**

Explanation: Not Applicable

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) and a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response: P**RE:**

Buildings and facilities are located on 37 acres. There is a main administration building and 12 other buildings. School is located within the administration building. Eight living units (Arnold, Bryant, Dugan, Palmer, Roberts, Skow, Turner and Infirmary-where youth's admission, special counseling & nursing department take place also) are reserved for youth. Four buildings (Recreational & Dietary Center, Wilson, Chapel & Maintenance) are used for on-campus activities, maintenance and storage. We are a 24/7 facility with staff to serve youth that are living on-campus.

The current technology infrastructure consists of separate data and voice networks. The data network is Ethernet based. Buildings are connected to the network backbone via fiber cabling and Cisco switches. Nodes are connected to the backbone by twisted pair CAT 5 wiring to a Cisco Switch. Network servers are Microsoft NT based. Internet services are provided by the ICN and a Cisco PIX firewall is installed for protection from the public network. The main wiring center for the data network is located in a computer room at the administrative building.

I, Telephony: The voice (telephony) network is about ten years old. Buildings are connected by copper wire and terminate in a central communications closet in the administrative building where the telephone system is located. PBX telephony FUJITSU has a single line telephone with eight trunks: six trunks used for telephone, one trunk used for *Facsimile* (FAX) and one trunk used for *Call Identity Delivery and Suppression* (CIDS). Features of our current system included:

    1, Call Management Features: Caller ID Support, Attendant Console Operations, Call Forward, One-touch Speed dialing, Manual Time-of-Day Service Modes

    2, Call Routing Features: Call Groups, Call Park, Call Pickup, Call Center Hunt Groups, and Automatic Route Selection (ARS)

    3, Voice Messaging Features: None--estimated cost if added $20,000

    4, Scalable: Support up to 96 extensions (current usage is 86 extensions, future overview is 120 extensions, estimated cost if upgraded more extensions: $1,000-1,200 per eight extensions, have to replace this old telephony system in the very near future)

    5, Administration Utility: DOS-based Starlog/StarlogII program, not user-friendly software, required some extensive and expensive training

    6. Other features: Support only analog phones

II, Wireless LAN: None, unable to run Ethernet cables in some area due to limited office space and convenience

III, Internet Filter Application: CyberPatrol LAN does not provide needed level services

IV, Intraweb Server: An old AT&T Server with a first generation Pentium processor and 32 MB of Random Access Memory (RAM). It is very hard to store or access any resources via current IJH Intranet

V. School Database Software: Treatment at the Iowa Juvenile Home consists of two parts; therapeutic behavior management along with the educational services. Our school program serves students of very low IQ levels through high school graduation. We must be capable of providing a secure record system to insure high standards of record keeping in the academic part of treatment of youth. Currently, we do not have any database software. In-housing Word and Excel templates make it hard to involve all staff needed in systematic reporting and statistic keeping. Redundant work is inevitable for now.

    POST:

I, Telephony: The best products are those that satisfy today's needs while giving staff at the IJH the freedom and flexibility to integrate now requirements in the future. Most company's purchasing telephone systems today realize this concept and are no longer willing to purchase older traditional PBX telephone technology that will not allow the convergence of voice and data to a single network. That is why we are considering NBX networked telephony solution. The NBX satisfies this need by providing an easy migration path to converged networks. This path is the logical first stop for us looking to integrate key components of voice and data networks today with a foundation for migrating to a single, cohesive, and cost effective technology infrastructure in the future. The NBX is known for high availability and reliability and comes standard with features that you pay extra for on other systems. Some of the key features supported on the NBX are:

    1, Call Management Features: Caller ID Support, Attendant Console Operations, Multiple & Multi-Level Automated Attendant Services, System-wide Paging, Computer Telephony Integration (CTI), Call Forward, One-touch Speed Dialing, Automated Time-of-Day Service Modes

    2, Call Routing Features: Hands-free Announcement (with an NBX business telephone), Phantom Mailboxes, Conference Call, Call Groups, Call Park, Call Pickup, Call Center Hunt Groups, Automatic Route Selection (ARS)

    3, Voice Messaging Features: Multiple & Multi-Level Automated Attendant, Integrated Voice Mail (with personalized greeting, password security and group messaging options), Unified & Multimedia Messaging (with MS Outlook 2000), Off-site notification, with a total of 400 hours of storage

4, Scalable: Support up to 250 devices, can be upgraded to 600 devices, however, we will not have a need for the upgrade in the future

5, Administration Utility: web-based user-friendly software required six-hour local administrator & users training. Local administrator will provide training for users

6, Other features: Converged Voice and Data Communications, Digital and Analog Support, Track and Control Cost and Voice Over IP (VoIP, however, we are not considering using this feature for now.

II, Wireless LAN: Authorized/Licensed wireless access in ICN and conference rooms for meetings

III, Internet Filter Application: Will provide detailed reports and a better administrator tools for youth server

IV, Intraweb Server: With a new server, staff at the IJH will have a better connect with local network resources.

V, School Database Software: Working with the new Database not only provides instant, detailed student information, but saves all personnel some valuable time. Whenever data is input into this new module, it is automatically shared with other modules that may require the same information. Plus, this system has comprehensive querying and reporting capabilities. The Herbert Hoover Junior and Senior High School (a part of the State of Iowa Department of Education) mandates will be fulfilled much more efficiently.

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response: 1, Telephony: Improve communication within the institution and its clients
2, Internet Filtering Service: Improve quality of education for youth (appropriate Internet access)
3, Upgraded Intraweb Server: Improve workflow for staff at the institution and will have a great impact in managing daily business functions.
4, Wireless LAN: Improve workflow with reliable network connectivity for meetings
5, School Database Software: Improve database management and statistics for youth we serve and reduce redundant and hand written work for all staff. Readily available reports cards, etc., would be compatible with other school systems rather than archaic.

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

Response: This project will have a direct and possitive impact for IJH's staff and its clients. Without replacing or upgrading the current commnucation system, the continuity of services we provide to citizens in Iowa will be interrupted and unsatisfied. Cessation of frustrations with current communications would be a Godsend. It will be impossible for us to continue to keep track of all youth records at school in the near future, without SASI database software.
In 1998, we technologically joined the 1980's! As you can see, we are far behind the Twenty First-Century technologies. Our 'brother' institution (Boys Training School in Eldora) is far more advanced with the School Database software. We need desperately to communicate with current systems and we need economic help. The state budget once again has us stymied in any expenditure.

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1. <u>Project Executive Sponsor Responsibilities</u>: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

    Response: No response required.

2. <u>Organization Skills</u>:
    a. List the project management skills necessary for successful project implementation
    b. List the project management skills available within the agency
    c. List the source(s) of project management skills lacking within the agency
    d. Summarize relevant agency project management experience and results

    > **Response:**   Proposed by Han Nguyen, Jean Posusta, Dennis O'Clair and Don Havran
    > a. Setting up meetings and conference calls to plan and determine the institution needs technologically
    > b. Database fundamentals (School software), administration (telephony, wireless LAN, Internet Filter & School Database software)
    > c. Training for new software
    > d. Implemented by IJH, ICN and DDM staff
    >   IJH staff will utilize their skills with additional consulting from DDM and ICN staff

B. Project Information

1. <u>History</u>:
    a. Is this project the first part of a future, larger project? If so, please explain.
    b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

    > **Response:**
    > a. Not Applicable
    > b. Not Applicable

2. <u>Expectations</u>: Describe the primary purpose or reason for the project.

    > **Response:**   Improve workflow for the institution (via communications and resources)
    > 1. Networking telephony system will definitely improve communication for staff and its clients, reduce workload for security staff at the IJH
    > 2. Wireless LAN; a new web server and a better Internet Filtering application will no doubt improve work productivity
    > 3. School software will bring us up to date with current educational standards or other school systems and make unbelievable improvement in efficiency

3. <u>Measures</u>: Describe the criteria that will be used to determine if the project is successful.

Response: The goal for this project (replacing new telephony system, new wireless LAN solution, replacing web server, Internet filter application & School Database) will serve the institution as a whole--benefiting staff, youth and its clients. A new School Database system will be compatible with other school systems and will effectively allow staffs access student's records at ease.

4. Environment: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

Response: State Contracted Vendors (providing hardware & software)
IJH, ICN & DDM staff (providing installation & configuration)

5. Risk: Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

Response: This project will probably be the first one to try out new NBX telephony technology. The NBX system offers so many good features and acts like another network device to provide new way to derive value and usefulness from the IJH's current networking infrastructure, compared to the expensive and traditional PBX telephony system.
Wireless LAN is also a new technology for us.
A new and better Internet Filter for school has no negative effect on student Internet access.
Not having School software would keep us in the dark ages and dysfunctional communication-wise.

6. Security / Data Integrity / Data Accuracy / Information Privacy
   a. List the security requirements of the project
   b. Describe how the security requirements will be integrated into the project and tested
   c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

IT PROJECT EVALUATION

Response:

a, Security requirements:

      1. Telephony: will work in the event of power failure with the assistant of UPS battery and/or in-house power generator

      2. Wireless LAN solution: will work if tested to ensure equipment will operate in desired locations. Access Control utility restricts access to the Wireless LAN by allowing only clients who are programmed with the Wire LAN service area ID of a given Access Point to connect to that Access Point. Another option for better security, an Access Control list can be created to specify the Media Access Control *(MAC--hardware address that uniquely identifies each node of a network)* addresses of wireless clients who are allowed to gain access with a particular Access Point. Plus, Wireless LAN Access Point offers multiple layers of security, including spread spectrum signaling, domain identification, authentication and encryption.

      3. Filtering Internet Services and Web Server: This powerful yet easy -to-manage application has the ability to transparently monitor, reports (up to fifty report formats), and manage youth Internet use in combination with a high-performance firewall appliance.

      4. School Database: Agency will retain backup copy of database on CD-ROM.

b, Testing & Integration:

      1. Telephony: A demo will take place before any purchases and installation.

      2. Wireless LAN: Test for a good location of Access Point and other related problems: network connection, security & access.

      3. Internet Filter: Testing the software--try out a demo version before the actual purchase.

      4. School Database: Daily review.

c, Data integrity, accuracy & private information:

      1. Telephony: A password for each mailbox

      2. Wireless LAN: Not Applicable

      3. Internet Filter: Not Applicable

      4. School Database: Repeated review and audit will occur in house. Passwords assigned for security purposes. Restrictions on users of School Database from a local database server.

7.   <u>Project Schedule</u>

   Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

Response: Project planning: Two months (IJH Staff)

                   Project evaluation: One year to be funded (from ITD, Governor and Legislature)

                   Project deployment & installation: Four months (IJH, ICN & DDM Staff)

SECTION III: TECHNOLOGY (In written detail, describe the following)

A. Current Technology Environment
  1. <u>Software (Client Side / Server Side / Midrange / Mainframe):</u>
     a. Application software
     b. Operating system software
     c. Major interfaces to other systems, both internal and external

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Response:
a, Application software
     1. CISCO PIX FIREWALL IOS version 4.0
     2. Front Page 3.0
     3. MS Visual InterDev 6.0
     4. DOS-based application for Analog Telephony system
     4. MS Office
b, Operating system software
     1. MS NT 4.0 server
     2. CyberPatrol LAN
     3. Windows 98 for laptops and desktops
c, Interface: Create a new VLAN for the new Telephony NBX system

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  2. <u>Hardware (Client Side / Server Side / Mid-range / Mainframe):</u>
     a. Platform, operating system
     b. Storage and physical environment
     c. Connectivity and bandwidth
     d. Logical and physical connectivity
     e. Major interfaces to other systems, both internal and external

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Response:
a, Platform, OS:
     1. Firewall Switch: IOS version 4.0
     2. FUJITSU PBX Telephony system: DOS-based administrator utility
     3. Servers (Intraweb and CyberPatrol): NT 4.0 & Windows 95
b, Storage & Physical Environment:
     1. FUJITSU PBX Telephony system: limited phone extensions, support up to 96 extensions
     2. Servers (Intraweb and CyberPatrol): limited hardware on both servers
c, Connectivity & Bandwidth: Not Applicable
d, Logical & Physical: Not Applicable
e, Interface: An additional T1-line might need for growth
        CISCO switches & 3COM hubs for expansion

B. Proposed Technology Environment

  1. <u>Software (Client Side / Server side / Mid-range / Mainframe)</u>
     a. Application software
     b. Operating system software
     c. Major interfaces to other systems, both internal and external
     d. General parameters if specific parameters are unknown or to be determined

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Response:

a, Application

    1. Upgrade CISCO PIX FIREWALL IOS (by DDM)

    2. Web-based administrator and users application for telephony devices (for the new NBX)

    3. Internet Filtering Services Application (replacing CyberPatrol)

    4. Internet Design Applications (FrontPage 2000 & Web Applications)

    5. Wireless LAN software (for Wireless LAN Access Point, Laptops & Desktops)

    6. School Software

b, Operating: MS Office 2000, Windows 2000 Pro & Server (by DDM)

c, Interface: Not Applicable

d, Parameters: Not Applicable

2. <u>Hardware (Client Side / Server Side / Mid-range / Mainframe)</u>

    a. Platform, operating system

    b. Storage and physical environment

    c. Connectivity and Bandwidth

    d. Logical and physical connectivity

    e. Major interfaces to other systems, both internal and external

    f. General parameters if specific parameters are unknown or to be determined

Response:

a, Platform

    1. Networked digital and analog telephony system

    2. Intraweb server

    3. Wireless LAN, PC and PIC networked cards

    4. An additional bandwidth T-1 (might need)

    5. Server for School Software

b, Storage:

    1. Networked digital and analog telephony system

    2. Intraweb server: more storage on hard drive & backup tape drive

    3. Wireless LAN, PC and PIC networked cards: Not Applicable

    4. Server for School Software: storage on hard drive & CD-R (Compact Disk Re-writable) drive to backup database

c, Connectivity: Not Applicable

d, Logical: Not Applicable

e, Interface: Not Applicable

f, Parameters: Not Applicable

C. Data Elements

If the project creates a new database, provide a description of the data elements.

Response: School Database Software will create new student database for the school:

Teacher Schedule	Reasons for Absenteeism
Grade Reporting	Seating Charts
Attendance Taking	Partial Grades
Level in Treatment Program	Educational Advisor Assignment
Daily Sheet Reports	Report Card Sharing
Special Education Needs	Grade Level Assignment
Inter-actible Data	Summer School Entries
Testing Results	Youth Schedules
Comment Area	Locker Assignment
Alternative Class Schedules	Educational Advisors
Statistical Gleaning	List Correlation
Charts	Different Report Formats (Annual, Monthly, Weekly, etc.)

SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right)\times \%\ State\ Share\right]+\left(Annual\ Ongoing\ Cost\times\%\ State\ Share\right)=Annual\ \mathrm{Pr}orated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$0.00	1	0%	$0	0%	$0.00
Software	$ 21,258.00	4	100%	$1,466.00	100%	$6,781.00
Hardware	$ 99,784.00	3	100%	$0.00	100%	$33,262.00
Training	$0.00	4	0%	$1000.00	100%	$1,000.00
Facilities	$0.00	1	0%	$0.00	0%	$0.00
Professional Services	$0.00	4	0%	$0.00	0%	$0.00
ITD Services	$0.00	4	0%	$0.00	0%	$0.00
Supplies, Maint, etc.	$ 3,055.00	4	100%	$0.00	100%	$764.00
NBX Services	$3,801.00	1	0%	$3,801.00	0%	$7,602.00

Contract						
Totals	$127,899.00	-------	-------	$6,268.00	------	$49,409.00

Transfer this amount to the ROI Financial Worksheet, item "D" on page 16.
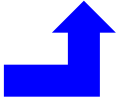
B. Funding: Enter data or provide response as requested

1. This is (pick one):   ☒ A Pooled Technology Fund or Reengineering Fund Request
                           ☐ An Agency IT Expenditure or Budget Request (General Fund, Road
                              Funds, etc)
                           ☐ Other – Specify:

2. On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$0	0%	$0	0%	$0	0%
Pooled Tech. Fund	$127,899.00	100%	$0	0%	$0	0%
Federal Funds	$0	0%	$0	0%	$0	0%
Local Gov. Funds	$0	0%	$0	0%	$0	0%
Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$0	0%	$0	0%	$0	0%
Total Project Cost	$127,899.00	100%	$0	0%	$0	0%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

> **Response:** Not Applicable

1. On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would
    be <u>absorbed</u> by your agency from normal operating budgets (all funding sources)?

> **Response:**
> 1. Renewal licenses for CyberPatrol on youth Network $900 yearly subscription
> 2. Maintenance for current telephony system estimated $20,000 to keep it up since its lifetime has already expired.
> A TOTAL COST to upgrade or replace a new PBX with features NBX offers is $187,700-$236,000 (120 telephone
> sets have not included in this estimate)

2. Identify, list, and quantify all <u>new annual ongoing</u> (maintenance, staffing, etc.) related costs (State
    $s) that will be incurred after implementation or expenditure.

> **Response:**
> 1. Renewal licenses for Internet Filtering Services $1,466.00 for 50 licenses
> 2. Renewal licenses for Wireless LAN (included with the package) is $0.00
> 3. Annual upgrade & training for school database software $1,000.00 after the first year
> 4. Yearly services contract for the NBX System is $3801.00

I P R O J E C T E V A L U A T I O N

C. ROI Financial Worksheet: Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:

1. Annual Pre-Project Cost – Quantify all <u>actual</u> state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process <u>prior to</u> project implementation. This section should be completed only if state government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:** The existing IJH phone system is failing. Most of the junction boxes in the tunnels are severely corroded. IJH has had several phone service interruptions each year and the number is increasing. Estimates of cost to the institution are:
> - Salary of a Maintenance Repairer (18 hours per week) to repair and maintain the current system : $15,000
> - Repair parts, and replacement parts: $8,000
> - Other costs (outside contractors; consultation fees, etc.) $3,500.
>
> That amount will increase next year. There is also a significant loss in Institution efficiency every time the phone system fails. Plus, we are a facility for troubled youth. Many of those youth can be violent. We rely on our phone system for security needs. When our phone system is down IJH staff are extremely vulnerable.

2. Annual Post-Project Cost – Quantify all <u>estimated</u> State government direct and indirect costs associated with activity, system or process <u>after</u> project implementation. This section should be completed only if State government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:** With the proposed new system, the estimated cost to maintain would be:
> - Salary of a Maintenance Repairer (4 hours per week) $1,580
> - Repair and replacement parts: $1,000
> - Other costs (outside contractors, consultation fees, etc.) $1,000

3. State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost". This section should be completed only if State government <u>operations</u> costs are expected to be reduced as a result of project implementation.

> **Response:** With the reduction in anticipated costs associated with a streamlined system; fewer hours spent on maintaining and repairing the equipment, it is anticipated that there will be a savings in operational costs of $22,920

4. Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb", use a value of $10 per hour for citizen timesaving and $.325 per mile for travel cost savings.

> **Response:** Savings realized as a result of more instantaneous connection to the party desired:
> - 300 hours (x $10 per hour) = $3,000

5. Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual <u>non-operations</u> benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program

penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

> **Response:** As noted above, the telephone system is used as a security tool to insure the safety of staff when a youth's behavior is out of control. With our current system, there are times (ranging from minutes to sometimes days) when the system is down. Staff has gotten hurt by youth as a result of said down time. With the new system, and less down time, the risk of needing workers compensation when staffs do get injured would be eliminated. Estimated savings would be:
> - 160 hours x $16 per hour = $2,560 x 12 (average pay-out for injured employees) = $30,720

6.   Total Annual Project Benefit -- Add the values of all annual benefit categories.

> **Response:** $56,640

7.   Total Annual Project Cost – It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related. Completing Section IV-A, Project Budget of the evaluation document will provide all the necessary information for this item.

> **Response:** $49,409

8.   Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

> **Response:** 1.1

9.   ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

> **Response:** 5.7%

10.   Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

Response:

1. Replacing the old Intraweb server will significantly increase work productivity in resources usage for all staff. The importance of this upgrade is rated as an 8 out of 10 for our institution.

2. A new School Database and a server will save staff time in researching, records keeping and statistic work manually. The importance of this system is rated as a 10 out of 10 for our institution.

3. Wireless LAN will give staff at the IJH a readily access to state resources while in a meeting or conference. The importance of this system is rated as a 7 out 10 for our institution.

4. A better Internet Filter Tool will give us a better control of youth's Internet access. The importance of this software is rated as a 7 out 10 for our institution.

11. ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	$15,000
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$8,000
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$3,500
A. Total Annual Pre-Project Cost:	$26,500
Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	$1,580
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$1,000
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$1,000
B. Total Annual Post-Project Cost:	$3,580
State Government Benefit (= A-B):	$22,920
Annual Benefit Summary	

State Government Benefit:	$22,920
Citizen Benefit:	$3,000
Opportunity Value or Risk/Loss Avoidance Benefit:	$30,720
C. Total Annual Project Benefit:	$56,640
D. Annual Prorated Cost (SECTION IV-A):	$49,409.00
Benefit / Cost Ratio: (C / D) =	1.1
Return On Investment (ROI): {(C – D)/ Requested Project Funds} x 100 =	**5.7%**
☒ **Benefits Not Readily Quantifiable: See Response from Part C.10 on page 15**	

Section V: ITC Project Evaluation Criteria

Criteria and Location in Project Evaluation Document	Points
1. Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2. Will the project improve customer service? **Location: Section I-B.2**	**15**
3. Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4. Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5. Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6. Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7. Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy?	**10**

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	Location: Section II-B1, IVB2	
8.	Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9.	Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10.	What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
	Total	**100**